

REMARKS

Applicants, their principal representatives in Germany, and the undersigned have carefully reviewed the first Office Action of May 14, 2008 in the subject U.S. patent application, together with the prior art cited and relied on in the rejections of the claims. In response, the Substitute Specification and the claims of the application, as filed, have been amended. It is believed that the claims, as filed, and even more clearly, as amended, are patentable over the prior art cited and relied on by the Examiner, taken either singly or in combination. Reexamination and reconsideration of the application, and allowance of the claims, is respectfully requested.

As set forth in the Substitute Specification which was filed with the application, as depicted in the drawings, and as recited in the claims that are now pending in the subject application, the present invention is directed to a printing group of a printing press. As may be seen in Fig. 1, a printing press is depicted schematically and includes a plurality of printing units, generally at 300. One of those printing units is depicted in detail in Figs. 3-5 and includes a pair of transfer cylinders 303 that cooperate to define a printing point through which a paper web can pass, as it is being printed.

Each of the transfer cylinders 303 is provided with an image to print from a forme cylinder 304. Each of these forme cylinders 304 is, in turn, provided with ink and also typically with dampening fluid. An inking system, generally at 305, is used to supply the ink. A dampening system, generally at 306, is used to supply the dampening fluid. In accordance with the present invention, and as recited in the currently pending claims, both of these systems utilize movable cylinders and/or rollers to supply their respective ink and dampening fluid to the forme cylinder along several selectable paths.

In the printing group recited in currently amended claim 23, the forme cylinder 304 is supplied with ink from an inking system that includes first, second and third ink distribution cylinders. These are cylinders 316, 324 and 321, respectively. It is important to note that these three ink distribution cylinders 316, 324 and 321 are all supported for both rotational and axial movement. The Examiner is requested to review paragraph 0062 of the Substitute Specification for a discussion of this axial movement of these three cylinders, as well as that of the distribution roller 329 of the dampening system. This axial movement is accomplished in a forced, positive manner by the use of appropriate drive gears. It is different from the axial movement of the application rollers 323 and 328 that is caused only by their frictional connection to their associated ink distribution cylinders 321 and distribution roller 329.

A first ink path is provided, as recited in currently amended claim 23 from the first distribution cylinder 316 through a movable one 318 of a plurality of inking rollers, to the rotatable forme cylinder through the second ink distribution cylinder 324. A second ink path is provided to the forme cylinder. It uses the third ink distribution cylinder 324. The at least one movable one of the inking rollers, 318, is supported for movement, as depicted in the dashed line and in the solid line shown in Fig. 3 between at least first and second positions. The second, rear ink path is supplied with ink selectively by direct contact between the movable inking roller 318 and one of the first ink distribution cylinder 316 and the second ink distribution cylinder 324 in accordance with the position of that movable ink roller 318.

Currently amended claim 25 recites the provision of three ink paths. The first ink path is from the first ink distribution cylinder 316 via the at least one movable inking

roller 318 and the second ink distribution cylinder 324. The second path is from the third ink distribution cylinder 321 to the forme cylinder. The third ink path is from the first ink distribution cylinder 316 via the third ink distribution cylinder 321 to the forme cylinder. The first ink path is before, in a sequence of ink applications to the forme cylinder, the second and third ink paths. The movable inking roller 318 selectively opens and closes the first and second front ink paths while the third, rear ink path remains uninterrupted.

Claim 30 includes the recitation of a dampening system including at least one dampening fluid distribution cylinder 329 and at least one dampening fluid application roller 328. The second ink application cylinder 324 can be selectively assigned to only the inking system, to only the dampening system and to both the inking system and the dampening system. This can be accomplished by the selective positioning of a movable one of the plurality of inking rollers; i.e. roller 318 and of the at least one dampening fluid application roller, 328.

In the first Office Action of May 14, 2008, claims 27, 28 and 30 were objected to as having several minor informalities. These several minor informalities have been corrected. All of the claims have been reviewed in an effort to eliminate such minor informalities and to ensure that all of the claim language has proper antecedent basis.

Claims 23-31 and 35-39 were rejected under 35 USC 102(e) as being unpatentable over U.S. patent No. 6,871,590 to Hummel. In part, it was noted that Hummel shows first, second and third ink distribution cylinders 9, 6 and 7 in the inking system. As will be discussed in detail below, that characterization of the Hummel reference is incorrect.

Claims 32-34 were rejected under 35 USC 103(a) as being unpatentable over

Hummel in view of U.S. patent No. 4,290,360 to Fischer. It was asserted that Fischer discloses that its dampening system is a five-roller dampening system. It was asserted that it would be obvious to modify the Hummel machine using Fischer's dampening system.

During a review of the Substitute Specification, in the course of the preparation of the present Amendment, several minor typographical errors and inconsistencies were noted. In several instances, the ink distribution cylinders were referred to as rollers. The designations of the second and third ink distribution cylinders as cylinders 324 and 321, respectively, were also reversed in several instances. These minor errors have been corrected. It is believed that the corrections of these minor errors do not raise any issues of new matter. The entry of these several corrected paragraphs of the Substitute Specification is respectfully requested.

It is the position of the Examiner, as set forth in the Office Action of May 14, 2008, that the Hummel reference anticipates claims 23-31 and 35-39 because, in part that Hummel discloses first, second and third ink distribution cylinders 9, 6 and 7 in its inking system. That assertion is incorrect. In the subject application, the system includes first (316), second (324) and third (321) ink distribution cylinders. As noted previously, and as set forth specifically in paragraph 0062 of the Substitute Specification, these three ink distribution cylinders 316, 324 and 321 are movable in an axial direction and in a positive manner. They rely on gear drives to force such axial movement in a forced manner. They are different from the application roller 328 and from the application roller 323 whose axial movements are caused only by their frictional engagement with one of the positively driven, axially movable ink distribution cylinders 316, 324, 321 and not by

the use of any traversing gear.

A thorough reading of the Hummel patent shows that it describes four axially movable ink distributors. The first is roller 14, which is described at Column 3, line 25 as being rotatably driven and axially transversible. A second ink distributor is roller 9 that is also recited, at Column 3, lines 33 and 34 as being rotatably driven and axially transversed. The third ink distributor is indicated as roller 6 and can be axially transversed, as recited at Column 3, lines 51 and 52. The fourth ink distributor is roller 8 which is also described, at Column 3, lines 64 and 65, as being rotatably driven and axially traversed. As may be seen quite clearly in Fig. 1 of the drawings of the Hummel reference, each one of rollers 14, 9, 6 and 8 is depicted as an outer circle with an inner concentric circle.

In contrast, the roller 7 of the Hummel reference, which the Examiner asserts is an ink distribution cylinder, is not one of the four ink distribution rollers or cylinders 14, 9, 6 and 8 identified as not in the Hummel reference. Instead, it is merely described as an inking roller which is mentioned as being a distribution roller. However, there is no recitation of axial movement of roller 7, as is the case with rollers 14, 9, 6 and 8. Roller 7 of the Hummel reference is also not depicted with an outer circle and an inner circle, as are the rollers or cylinders 14, 9, 6 and 8.

The Hummel patent is the U.S. equivalent of De 199 56 149. In that document, the ink distribution rollers 14, 9, 6 and 8 are named "Farbrieber" and the roller 7 is named "Farbwalze" or "Verteilerwalze." It is thus quite clear that the roller 7 is not, in fact, an ink distribution cylinder either in the context of the Hummel application or as that term is used in the subject application.

Claim 23, as filed, and even more clearly as amended, is not anticipated by the Hummel reference. Claim 23 recites the provision of first, second and third ink distribution cylinders 316, 324 and 321. The Hummel equivalents would be rollers 9, 6 and 8, not 9, 6 and 7 as asserted in the Office Action. Claim 23 recites means supporting the at least one movable ink roller; i.e. roller 318 for movement in the inking system between first and second positions to supply ink to the second ink path selectively by either direct contact between the movable roller 318 and one of the first ink distribution cylinder 316 and the second ink distribution cylinder 324.

In the Hummel reference, the rollers 10 and 11 are movable with respect to the ink distribution roller 9 and the inking roller 7 and the ink distribution roller 6, respectively. This is different from the structure recited in currently amended claim 23. The movable roller 10 of Hummel is selectively in contact with the roll 9 and with the roller 7, but not with the ink distribution roller 8. Thus, Hummel does not anticipate or render obvious the printing groups recited in claim 23, as filed, and even more clearly as amended.

In claim 23, as filed, and as amended there is recited at least one movable one of the plurality of inking rollers. There may be only one such movable ink roller. In the Hummel patent, there are at least two rollers, 10 and 11 that are both clearly supported for movement with respect to the ink distribution cylinder 9. The movable roller 11 of Hummel is movable into and out of contact with the ink distribution cylinder 6. The separate movable roller 10 is movable into and out of contact with the roller 7. As has already been discussed in detail, roller 7 is not an ink distribution cylinder, as that term is defined in the subject application and is not one of the four ink distribution cylinders

14, 9, 6 and 8 of the Hummel patent. Again, claim 23, as filed, and even more clearly as amended, is not anticipated by the Hummel reference.

Independent claim 25 is also not anticipated by the Hummel reference. In claim 25, as filed, and even more clearly as amended, there are recited the three ink distribution cylinders and the at least one movable one of the plurality of inking rollers. Claim 25 further recites three ink paths. The first is from the first ink distribution cylinder 316, via the movable ink roller 318 and the second distribution cylinder 324 to the forme cylinder. The possibly comparable path in Hummel would be from the ink distribution cylinder 9, through the movable roller 11 to the ink distribution cylinder 6.

In claim 25, the second ink distribution path is from the third ink distribution cylinder 321 to the forme cylinder. In Hummel, that path would have to be from the ink distribution cylinder 8 to the forme cylinder.

In claim 25, as amended, there is also recited a third ink path from the first distribution cylinder 316 via the third distribution cylinder 321 to the forme cylinder. Claim 23 also recites that the first ink path is located before the second and third paths. This claim also recites that the movable inking roller selectively opens and closes the first and second paths while the third path is uninterrupted. Hummel does not have an equivalent structure or function. Claim 25, as filed and even more clearly as amended, is not anticipated by the Hummel reference.

Claim 30, as filed, and even more clearly as amended, is also not anticipated by the Hummel reference. Claim 30 includes the recitation of a dampening system including at least one dampening fluid distribution cylinder 329 and at least one dampening fluid application roller 328. The dampening fluid distribution cylinder 329 is

seated for axial movement, as are the three ink distribution cylinders 316, 321 and 324, as is discussed in paragraph 0062 of the Substitute Specification. Claim 30 recites that the second ink distribution cylinder 324 can be selectively assigned to only the inking system, to only the dampening system and to both the inking system and the dampening system by selective positioning of the movable one of the plurality of inking rollers and the at least one dampening fluid application roller.

In the Hummel reference, there is no discussion of the structure of claim 30. The dampening system 3 of Hummel does not include an axially movable cylinder. It also has at least two movable ink rollers, not just one. Any movement of either of the two movable cylinders of Hummel does not have any effect on the supplying of dampening fluid to the forme cylinder. In the Hummel device, the rollers of the dampening system are not described in any detail. It is set forth in Hummel that the wetting system 3, or at least the wetting agent application roller, can be separated from the plate cylinder 2. It can be assumed that since only one of the rollers in the wetting system 3 of Hummel is in contact with the plate cylinder 2, with that being the upper one of the two rollers of the wetting system 3, with the + on its center, that it is the application roller. In Hummel, that application roller contacts only the plate system 2. In the subject device, as recited in claim 30, the second ink application cylinder 324 can be arranged selectively in only the inking system, in only the dampening system and in both the inking and dampening systems by selective positioning of the movable ones of the inking roller and the movable dampening fluid application roller. This is clearly different from the structure described in the Hummel reference. Thus, claim 30, as filed, and even more clearly as amended is believed to not be anticipated, or rendered obvious by the Hummel

reference.

All of the rest of the claims that are now pending in the application depend, either directly or indirectly, from one of believed allowable independent claims 23, 25 or 30 and are thus also believed to be allowable. With respect to claims 32-34, the secondary reference to Fischer is directed only to a dampening fluid application device. It does not show an overall printing group with an inking system. While it may show such a dampening fluid application system that uses five rollers, that teaching does not overcome the teachings of the rest of the system which are missing from the primary Hummel reference. The combination of Hummel with Fischer thus does not render obvious claims 27, 28 and 30 from which claims 32, 33 and 34 depend, claims 27 and 28 depending from believed allowable independent claims 23 and 25 respectively. It is thus believed that these claims are also allowable.

The additional prior art cited in the Office Action of May 14, 2008, but not relied on in the rejections of the claims, has been noted. Since it was not applied against the claims, no further discussion thereof is believed to be required.

SUMMARY

The Substitute Specification has been amended to correct several minor errors. Those corrections do not constitute any new matter. Independent claims 23, 25 and 30 have been amended, as have a number of the dependent claims, to more clearly patentably define the subject invention. It is believed that all of the claims now pending in the application are patentable over the prior art cited and relied on, taken either singly or in combination. Allowance of the claims, and passage of the application to issue is respectfully requested.

Respectfully submitted,

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